

A NEW WESTERN AUSTRALIAN SPECIES OF PROSTANTHERA SECTION KLANDERIA (LABIATAE)

by

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ABSTRACT

Conn, B. J. A new Western Australian species of *Prostanthera* section *Klanderia* (Labiatae). *Muelleria* 6(5): 371-374 (1987). — *Prostanthera carrickiana* is described for the first time.

INTRODUCTION

A study of the flora of the eastern Roe botanical district by M. Burgman (Hopper 1985, *in litt.*) revealed the presence of a new Western Australian species of *Prostanthera* Labill. section *Klanderia* (F. Muell.) Benth. Although Burgman collected this new species in 1983, I was unaware of its discovery prior to the publication of my recent revision of this section (Conn 1984). This species is here described for the first time.

Terminology and presentation follows that used by Conn (1984, pp. 211-220).

TAXONOMY

Prostanthera carrickiana Conn, sp. nov.

Species nova Sectionis *Klanderiae*. *Frutices* circa 0.5 m. alti. *Rami* et *ramuli* plus minusve teretes, partim dense tomentosi. *Folia* glabra; *petiolus* 0.7-1 mm. longus; *lamina* elliptica, 13-14 mm. longa, 5.5-8 mm. lata, basi subacuta, margine integro, apice subacuto. *Pedicellus florum* 2.5-2.8 mm. longus, glaber, *prophyllis* 0.7-1 mm. e basi calycis affixis. *Calyx* 6.5-7.5 mm. longus, extra glaber, intra tomentosus prope basin loborum; *tubus* 4.5-6 mm. longus; *lobi* depresso deltoidei, circa 2 mm. longi, 3.5-4 mm. lati, apice obtuso. *Corolla* 23-26 mm. longa, subrosea, extra in partibus distalibus moderate usque dense tomentosa; *tubus* 13-15 mm. longus, intra glaber; *lobus abaxiali-medianus* latissime ovatus et concavus, 2.5-3.5 mm. longus, 3.4-4 mm. latus, margine integro, apice rotundato, *lobis lateralibus* depresso ovatis usque latissime ovatis, 1.5-2 mm. longis, 2.3-4 mm. latis, margine integro, apice rotundato, *pari loborum adaxiali-mediano* depresso ovato usque latissime ovato, 6-6.5 mm. longo, 8-9.8 mm. lato, margine integro vel leviter irregulari, apice bilobato, sinu circa 1.8 mm. longo. *Stamina* circa 12 mm. e basi corollae affixa; filamenta circa 9 mm. longa; antherae 2-2.5 mm. longae, appendice absens. *Pistillum* 23-26 mm. longum; ovarium circa 0.4 mm. longum; stylus 22-25 mm. longus; lobis stigmatibus 0.7-1 mm. longis. *Fructus* non visi.

TYPE: *Burgman (& McNee) 1193*, 3.v.1983, 0.5 km E. of Clyde Hill, Western Australia (Holo.: PERTH).

Erect shrub, c. 0.5 m high. *Branches* ± terete, densely hairy on the region extending from within each leaf axil to the next more distal node [at least 120 hairs/mm²]; hairs simple, variously curved, antrorse to retrorse, 0.2-0.6 mm long; glands not distinct. *Leaves* glabrous; *petiole* 0.7-1 mm long; *lamina* elliptic, 13-14 x 5.5-8 mm [length to width ratio 1.6-2.4, distance of maximum width from base to total lamina length ratio 0.5], base subacute, margin entire, apex subacute; venation not visible except for midrib faint on abaxial surface. *Inflorescence* a frondose racemiform conflorescence, uniflorescences monadic; 2-6-flowered [per conflorescence]. *Pedicel* 2.5-2.8 mm long, glabrous; *prophylls* inserted 0.7-1 mm from distal end of pedicel, hence overlapping basal part of calyx [a_1 axis to anthopodium ratio 2-2.1], narrowly obovate, 2.3-3 x 0.8-0.9 mm [length to width ratio 2.9-3.3, distance of maximum width from base to total lamina length ratio c. 0.7], glabrous, base narrowly cuneate, margin entire, apex obtuse. *Calyx* 6.5-

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7.5 mm long, green, outer surface glabrous, inner surface glabrous except densely hairy near base of lobes [c. 116 hairs/mm²]; hairs simple, c. 0.1 mm long; *tube* 4.5-6 mm long; *lobes* depressed triangular, c. 2 mm long, 3.5-4 mm wide at base [length to width ratio 0.5-0.6], apex obtuse. Corolla 23-26 mm long, pinkish-red; outer surface glabrous basally, moderately to densely hairy distally [83-100 hairs/mm²]; hairs simple, usually antrorse, 0.1-0.2(-0.4) mm long; *tube* 13-15 mm long, inner surface glabrous; *abaxial median lobe* very broadly ovate, concave, 2.5-3.5 mm long, 3.4-4 mm wide [length to width ratio 0.7-0.9], margin entire, apex rounded; *lateral lobes* depressed ovate to very broadly ovate, 1.5-2 mm long, 2.3-4 mm wide [length to width ratio 0.5-0.8], margin entire, apex rounded; *adaxial median lobe-pair* depressed ovate to very broadly ovate, 6-6.5 mm long, 8-9.8 mm wide [length to width ratio 0.6-0.8], margin entire or slightly irregular, apex bilobed (sinus c. 1.8 mm long). *Stamens* inserted c. 12 mm above base of corolla [refer 'Notes']; filaments c. 9 mm long, glabrous; anthers 2-2.5 mm long, connective with a few triangular trichomes basally (trichomes c. 0.1 mm long), appendage absent. *Pistil* 23-26 mm long; ovary c. 0.4 mm long; style 22-25 mm long; stigma 0.7-1 mm long. *Mericarps* not seen. Fig. 1.

DISTRIBUTION:

Only known from near Clyde Hill (South-West: Roe), Western Australia.

ECOLOGY:

Occurs in a Mallee community with a low shrub understorey in greyish-brown sandy clay soils (*Burgman 1193*).

CONSERVATION STATUS:

Burgman (1985, p. 278) believed that this new species 'should be considered endangered' since it is only known from an area which is being developed for agricultural purposes — Risk Code = 1 or 2E (Leigh *et al.* 1981). Burgman suggested that another collection (*viz.* *Smolinski s.n., s. dat.*, 1.5 km NE. of Clyde Hill) also belongs to this taxon. Since I have not examined this specimen, I am unable to comment on its identity.

NOTES:

The 'Key to species' in Conn (1984, p. 288) should be changed so that this species is included. Couplet 2 should read:

- 2a. Leaves 5-13 mm wide* (New South Wales, Western Australia, Victoria) 15
 2b. Leaves up to 2.5 mm wide (Western Australia) 3

and the following couplet should be inserted:

- 15a. Leaves 15-50 mm long, corolla 30-35 mm long, prophylls 10-18 mm long (New South Wales, Victoria) 13. *P. monticola*
 15b. Leaves 13-14 mm long, corolla 23-26 mm long, prophylls 2.3-3 mm long (Western Australia) *P. carrickiana*

In the description it is stated that the 'Stamens are inserted c. 12 mm above base of corolla'. It would be more correct to state that the stamens and corolla are adnate to about 12 mm above the base of corolla because the course of the filaments on the corolla may be observed as slightly raised lines for most of its length.

* Couplet 2a in Conn (1984, p. 288) states 'Leaves 5-13 mm long . . .'. This is a typographical error which should be corrected to 'Leaves 5-13 mm wide . . .'.



Fig. 1. *Prostanthera carrickiana*. a — twig and flowers, x 1. b — flower, x 2. c — stamen, dorsal view, x 12. d — stamen, ventral view, x 12. All from *Burgman (& McNee) 1193*.

The affinities of this new species are unclear. Considering all the species of *Prostanthera* section *Klanderia*, the relatively broad leaves of *P. carrickiana* are reminiscent of *P. monticola* and *P. porcata* of south-eastern Australia. There does not appear to be a close relationship with any of the Western Australian species of section *Klanderia* or with those of section *Prostanthera*.

ETYMOLOGY:

The specific epithet honours John Carrick whose principal research interest was directed towards a revision of the Prostantheroideae until his untimely death in 1978. For brief biographies of J. Carrick refer Anonymous (1979) and Henderson (1978).

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